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Book Review

The Inescapable Mental Residue of Homo Categoricus

A review of Mahzarin R. Banaji and Anthony G. Greenwald, *Blindspot: Hidden Biases of Good People*. Delacorte Press: New York, 2013, 254 pp., US\$27.00, ISBN #978-0-553-80464-5 (Hardcover).

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A groundbreaking article in psychology was published in 1995 by Anthony Greenwald and Mahzarin Banaji. This article laid out the argument for implicit social cognition—the idea that much of our information processing of social stimuli occurs below the threshold of conscious awareness, and that because of this, indirect measures should be used to study implicit "attitudes" among other implicit social cognitions. Soon, empirical research in the area of social cognition was forever changed by the introduction of the Implicit Associations Test (IAT) by Greenwald, McGee, and Schwartz (1998). This task pairs different target concepts with different attributes, and subjects respond faster to the concepts that are more highly associated with each other for that individual. It is, essentially, a learning task where it is easier to learn the rules of the game the more highly associated the concepts are with each other. For less associated concepts, it is more difficult to learn the rules of the game.

Much was initially made of whether or not the IAT measured "attitudes." In social cognition, an "attitude" is an evaluation that has affective, cognitive, and behavioral components (see Mather and Romo, 2007). Historically, attitudes had been measured with explicit self-report measures. However, the IAT, along with John Dovidio's implicit measure of racial attitudes (Dovidio, Kawakami, Johnson, Johnson, and Howard, 1997), led the charge into the domain of implicit social cognition research in attitudes. But did the IAT really measure an "attitude"? Researchers showed compelling evidence that the IAT measures environmental associations, or connections that we have learned from society (Karpinski and Hilton, 2001; Olson and Fazio, 2001, 2003, 2004). Possessing these associations does not indicate that the person endorses them. But how much do these environmental associations affect behavior? Are they really "attitudes," complex entities with three components? Perhaps they are best described as "inescapable mental residue" (Banaji and Greenwald, 2013, p. 99) that comes from our exposure to associations congruent with information within our culture.

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In *Blindspot: Hidden Biases of Good People*, Banaji and Greenwald argue that, not only do people harbor hidden biases about others based on social categories, but that implicit biases are a human universal. In other words, they suggest that the human tendency to stereotype is a byproduct of a once useful psychological adaptation. Banaji and Greenwald did an excellent job tackling this controversial topic by first discussing those errors in human judgment that many people are familiar with, such as perceptual errors, and then using that information as building blocks to seamlessly guide the reader from those familiar truths to the rather unfamiliar truths about social cognition.

To begin, Banaji and Greenwald introduce the term "Mindbugs," which are described as "…ingrained habits of thought that lead to errors in how we perceive, remember, reason, and make decisions" (p. 4). In other words, much of human cognition is automatic and unconscious. Importantly, these automatic processes oftentimes work beneath the surface of our awareness, so we are not always aware of the source of our judgments. Sometimes, we are not even aware of the actual judgments. These automatic processes are less elaborate compared to intentional thought processes, so when an accurate judgment requires some level of elaboration, the automatic processes can fall prey to mindbugs.

This idea might seem far-fetched, but Banaji and Greenwald provide several examples of visual mindbugs. Some of these include errors in judging colors and sizes of different objects, and they beautifully illustrate instances when the human brain receives visual information that is perceived inaccurately due to automatic, unconscious processes. For example, we might perceive a drawing of two same-sized objects to be different sizes if they are drawn at different angles. Although our retinas are receiving information that the objects are the same size, our perception of the objects is that they are different sizes.

Humans are not limited to visual mindbugs. The authors provide many examples of social mindbugs—those errors in social judgments that result from automatic processes. Some of these social mindbugs can be explained by judgment heuristics, which are those mental shortcuts used to make quick judgments. Take, for example, the representativeness heuristic. If one imagines the occupation of a woman wearing an expensive suit and the occupation of another woman wearing jeans and a t-shirt, it is likely that the woman wearing an expensive suit was assumed to have a more professional career than the woman wearing more casual attire. That is because people wearing suits are more representative of "professional business people" than people wearing casual attire. The result of such a mindbug is that people might treat others differently depending on some minor feature such as style of dress.

Banaji and Greenwald convincingly argue that social mindbugs are pervasive, and they suggest that our evolutionary past shaped our minds this way. Because ancestral humans lived in small, homogenous groups, social choices likely influenced survival. During that time, being wary of people that were different from us was a safe strategy. For that reason, our minds evolved to make snap social judgments based on minor features such as skin color, gender, age, etc. Today, they argue, heterogeneity defines our social circles, so avoiding those who are different from us is less often a good strategy and can lead to negative consequences, such as prejudice and discrimination. As Banaji and Greenwald put it, "The demands placed on us to survive in the past are not the same demands that allow us to thrive now" (p. 19).

Today, society frowns upon people who make judgments of others based on stereotypes. That makes measurement of these types of attitudes difficult, which motivated the development of the IAT (Greenwald et al., 1998). The IAT has been used to measure automatic associations related to race, age, gender, and other social groups. Millions of people have taken the test and

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the results suggest that many people do automatically stereotype. Specifically, they have a positive bias toward a particular social group (e.g., a preference for one race over another), or they associate certain social groups with certain traits (e.g., the Elderly associated with "forgetful"). However, many of those people hold egalitarian goals in their own conscious, reflective minds. In other words, despite expressions of equality for all, their implicit attitudes reflect a stereotyping mind. Just as we have visual blindspots, so it seems we have blindspots in the mind as well.

Some have argued that people might be aware of their own personal biases but simply choose to hide them from others because those attitudes are socially undesirable (e.g., Crosby, Bromley, and Saxe, 1980). That is, some suggest we engage in impression management by lying. We tell people that we have egalitarian attitudes when we secretly harbor biased attitudes. The bogus pipeline technique provides some insight into this issue (Jones and Sigall, 1971). To use this technique, researchers hook participants up to fake equipment that ostensibly detects if the participants are lying. This technique motivates participants to tell the truth—why lie if the researcher knows you are lying? Participants hooked up to bogus pipelines. Those results are in line with the idea that people have access to their negative, less socially desirable attitudes and that they lie to save face. Interestingly though, lying to save face does not explain other research findings on hidden biases.

It is not socially acceptable to condone negative stereotypes about other people, which is precisely why one might lie about his or her true attitudes of other people. However, the social mindbugs that lead to stereotyping of other people can also lead to stereotyping of oneself if one happens to be a member of a stereotyped group. For example, when elderly participants take an IAT measuring their automatic attitudes toward young people and elderly people, they consistently show a negative attitude toward the elderly. The elderly show automatic, negative biases against their own group! In other words, hidden biases are not always against "them." Sometimes, the hidden biases are against ourselves, when "we" think we are "them."

Banaji and Greenwald state that people hold hidden biases against social groups, including their own groups, due to cultural inputs—a passive learning of cultural stereotypes. That is, "...the outside ends up inside the mind" (p. 68). According to the authors, stereotyping by social category is a universal human trait and, like other human universals, is likely a byproduct of a previously adaptive characteristic. The ability to effortlessly categorize the world allows people to make quick decisions—an ability that could have promoted survival throughout our evolutionary past. However, in today's heterogeneous society, this adaptation can lead to the inaccurate judgments and prejudice.

The idea that stereotypes are byproducts of once useful psychological adaptations is not new, but Banaji and Greenwald take this idea a step forward by theorizing that stereotyping is also adaptive in the present. Specifically, they put forward the idea that stereotyping allows humans to perceive strangers as distinct individuals. This might seem counterintuitive if one thinks of a stereotype based on a single category (e.g., "All lawyers are like..."). However, a brief glance at a stranger provides an abundance of information that can be used for categorization: gender, race, age, cloths, accessories, etc. All the stereotypes associated with those traits are activated at once, and people use that information to place others in distinct categories. Banaji and Greenwald are quick to point out that this does not imply judgments are accurate, but rather, they are more complex than would be if people only used one trait to make judgments about others.

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Notably, a great deal of the categorizing that people do relies on an "us-versus-them" dichotomy. Banaji and Greenwald discuss findings that suggest that, not only are human babies hardwired to form categories, but they also have a strong preference for the familiar—their "ingroup." The survival value in this preference rests on the assumptions that similar others are part of the in-group and that in-group members are more likely to help and offer safety than are outgroup members. Again, the argument is made that the biases that lead to unfair treatment of others in current times probably served an adaptive function in ancestral times.

Humans make social categories universally, even when minimal groups are assigned (Tajfel and Turner, 1986; Turner, Hogg, Oakes, Reicher, and Wetherell, 1987). Banaji and Greenwald described humans as *Homo categoricus* for this reason, reinforcing the point that we humans do this automatically. We are wired to make categories of things. Bruner (1957) noted this tendency in his concept of perceptual readiness. Banaji and Greenwald have appropriately captured their provocative, impactful line of empirical research on social cognition in *Blindspot*. This book is appropriate for undergraduate psychology students, graduate psychology students, and a lay audience. Innovative social scientists of all categories would benefit from reading this book. Evolutionary psychologists have the opportunity to take a peek into a high profile line of behavioral research on universally-wired cognitive processes of social categorization and derive hypotheses from evolutionary theory. Why does the human mind work in the way that Banaji and Greenwald compellingly provide evidence for? Although associations may not be "attitudes," they certainly affect behavior, whether or not a chronic egalitarian endorses the association or not. Such is the inescapable mental residue of *Homo categoricus*.

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